AMENDMENTS TO THE CLAIMS

This Listing of the Claims will replace all prior versions, and listings, of claims in this application.

Listing of the Claims:

1.   (Currently Amended) A digital data system comprising

a link that carries message packets,

a first node sending a plurality of message packets to a second node on the link as a sequence of message packets, with each message packet being sent from the first node with a sequence identifier, and each message packet comprising an initial portion comprising an error code,

the second node (i) inspecting the error code for each packet received on the link to detect an error condition, and (ii) returning a control symbol along with the sequence identifier of the received packet to the first node based on the result of that inspection,

the second node returning the control symbol to the first node before the entire message packet has arrived at the second node, and

~~the second node returning a control symbol to the first node for each packet received on the link along with the sequence identifier of the received message packet, and~~

the first node responding to the control symbol to control the further transmission of message packets to the second node over the link.

~~wherein the first node is configured to transmit message packets of a first size including an initial number of bytes, and of a second size including a further number of bytes, and~~

~~wherein a receiving node applies a first error code to an initial number of bytes~~

~~whereby corruption of an initial portion of a packet is detected without reference to a subsequent portion of the packet.~~

2.   (Cancelled)

3.   (Cancelled)

4.   (Previously Presented) A digital data system according to claim 1, wherein the second node returns a packet-not-accepted control symbol to the first node indicating receipt on the link of a message packet that is out of sequence.

5.   (Currently Amended) A digital data system according to claim 4, wherein the first node responds to a the packet-not-accepted control symbol by re-sending a portion of the sequence of message packets.

6.   (Original) A digital data system according to claim 5, wherein the first node queries the second node for an identifier of a message packet in the sequence with which to begin resending.

7.   (Currently Amended) A digital data system comprising
        a link that carries message packets,
        a first node sending a plurality of message packets to a second node on the link, with each message packet comprising an initial portion comprising an error code,
        the second node (i) inspecting the error code for each packet received on the link to detect a packet error, and (ii) returning a control symbol to the first node for each packet received on the link, the control symbol indicating a the packet error, and
        the second node returning the control symbol to the first node before the entire message packet has arrived at the second node, and
        the first node responding to the control symbol to control the further transmission of message packets to the second node over the link.
        ~~wherein the first node is configured to transmit message packets of a first size including an initial number of bytes, and of a second size including a further number of bytes, and~~
        ~~wherein a receiving node applies a first error code to the initial number of bytes~~
        ~~whereby corruption of an initial portion of a packet is detected without reference to a subsequent portion of the packet.~~

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8.   (Original) A digital data system according to claim 7, wherein the control symbol specifies identity of a received packet having an error condition.

9.   (Original) A digital data system according to claim 7, wherein the control symbol identifies the type of packet error.

10.   (Previously Presented) A digital data system according to claim 7, wherein the first node transmits a message packet comprising a header portion and a data portion, at least said data portion including an error code, and wherein the second node applies said error code to detect the packet error.

11.   (Previously Presented) A digital data system according to claim 7, wherein the first node transmits a message packet comprising a header portion followed by a data portion, and
        the second node inspects at least a portion of the header portion to detect a first error condition,
        passing a symbol over the link to the first node to initiate retransmission when it detects the first error condition.

12.   (Cancelled)

13.   (Currently Amended) A digital data system comprising
        a link that carries message packets,
        a first node sending a plurality of message packets to a second node on the link,
        the second node returning a control symbol to the first node for each packet received on the link, the control symbol indicating a packet error, and
        the first node responding to the control symbol to control the further transmission of message packets to the second node over the link
        wherein the first node is configured to transmit message packets of a first size including an initial number of bytes, and of a second size including a further number of bytes, and
        wherein a receiving the second node applies a first error code to the initial number of

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bytes

whereby corruption of an initial portion of a packet is ~~quickly~~ detected without reference to a subsequent portion of the packet

wherein when a further number of bytes appear in the message packet, the <u>second</u> ~~receiving~~ node applies a second error code to the further number of bytes.

14.   (Currently Amended) A digital data system comprising

first and second nodes connected by a first link,

the first node sending a plurality of message packets to the second node over the first link, each message packet <u>including a header portion and a further portion, the header portion</u> including an error code

the second node checking the error code and sending a valid message packet to a further node over a further link,

~~wherein the message packet includes a header portion and further portion~~

at least a part of the header portion being a changeable part that may change as the message packet passes from the first link to the further link, and at least a part of the message packet being an invariant part that does not change

whereby the error code need not be recalculated when the message packet passes to the further link

~~wherein the first node is configured to transmit message packets of a first size including an initial number of bytes, and of a second size including a further number of bytes~~.

<u>whereby corruption of the header portion of the packet is detected before the second node has received the entire packet, and without reference to the further portion of the packet.</u>

15.   (Original) A digital data system according to claim 14, wherein the changeable part includes a sequence identifier, and the second node compares the changeable part of a message packet with an expected sequence identifier to detect an error.

16.   (Previously Presented) A digital data system comprising

first and second nodes connected by a first link,

the first node sending a data from a buffer as a transmission sequence of one or more

messages to the second node over the first link, each message including a sequence identifier in an initial portion of the message

the second node checking the initial portion to identify a faulty message reception

and communicating said sequence identifier to the first node with a symbol indicating whether reception was proper such that the first node may respond to the symbol by clearing the buffer or retransmitting at least a portion of the transmission sequence

whereby corruption of the initial portion is detected without reference to a subsequent portion of the packet.

17.   (Currently Amended) A digital data system comprising

first and second nodes connected by a first link,

the first node sending a plurality of message packets to the second node over the first link with each message packet being sent from the first node with a sequence identifier, and each message packet comprising an initial portion comprising an error code,

the second sending the message packets to a further node over a further link,

the second node (i) inspecting the error code for each packet received on the link to detect an error condition, and (ii) returning a control symbol to the first node for each packet received therefrom the first link along with the sequence identifier of the received message packet based on the result of that inspection,

the second node returning the control symbol to the first node before the entire message packet has arrived at the second node,

the first node responding to the control symbol to control the further transmission of message packets to the second node over the first link,

such that transmission of data packets from the first node to the further node proceeds efficiently.

wherein the first node is configured to transmit message packets of a first size including an initial number of bytes, and of a second size including a further number of bytes, and

wherein a receiving node applies a first error code to the initial number of bytes

whereby corruption of an initial portion of a packet is quickly detected without reference to a subsequent portion of the packet.

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